

AN ON-CHIP DIGITAL THERMOMETER TO SENSE
AND MEASURE DEVICE TEMPERATURES

ABSTRACT OF THE DISCLOSURE

A system and method for sensing the temperature of a device.
5 This includes the establishment of a programmable current from an
on-chip source, which in turn is used to produce a temperature
dependent voltage from a temperature dependent resistive device.
The temperature dependent resistive device is thermally coupled
to a device for which the temperature is to be sensed. The
10 temperature dependent voltage produced is converted to a digital
value and equated to the temperature of the device.